

UCD IMPROVE Technical Information #2510

Cleaning Loose Screens

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*July 15, 2022
Version 3.0*

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DOCUMENT HISTORY

Date Modified	Initials	Section/s Modified	Brief Description of Modifications
03/04/2022	SRS	All	Previously anthologized version separated into individual TIs.
4/14/2022	GRM	All	Updated wording to accommodate new procedure.

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1. PURPOSE AND APPLICABILITY

The purpose of this TI is to describe the equipment, supplies, and details needed to clean 25 mm loose screens.

2. SUMMARY OF THE METHOD

25 mm loose screens are cleaned using ethanol to remove any residue that may have accumulated during sampling. Loose screens used for quartz (3C) filters are kept separate from those used for PTFE (1A and 4D) filters to avoid any cross contamination.

3. CAUTIONS

Make sure to use the appropriate forceps, cleaning jars, and containers for the screens being cleaned. Since the 3C screens are separated from the 1A and 4D screens, there are two sets of equipment to use so that no cross contamination can occur.

4. HEALTH AND SAFETY WARNINGS

Ethyl alcohol can be absorbed through the skin and is irritating to the eyes. Nitrile gloves, lab coat, and safety glasses must be worn while performing this task. To reduce the dispersion of fumes, this procedure is completed in a fume hood located in the chemistry laboratory.

5. EQUIPMENT AND SUPPLIES

- Fume hood
- 2 Glass Jars with cover (1 for C screens, 1 for A+D screens)
- Drying rack with spill tray
- 2 forceps (1 for C screens, 1 for A+D screens)
- Ethanol (at least 97%)
- Funnel
- Nitrile gloves, Lab coat, safety glasses (must be worn when using ethanol)
- EH&S plastic container for ethanol waste
- 2 containers for cleaned screens (1 for Cs, 1 for A+D screens)

6. PROCEDURAL STEPS

1. Pour the used screens into the appropriate glass jar; if cleaning quartz screens, use the designated quartz jar. If cleaning screens used with PTFE filters, use the designated 1A and 4D jar. Fill the jar with the screens about $\frac{3}{4}$ full.
2. Put on gloves, lab coat, and safety glasses before beginning the procedure. Bring the used loose screens from the sample handling laboratory into the chemistry

laboratory in room 116.

3. Fill the glass jar with ethanol to approximately 1" above the level of the screens.
4. Cover the jar and swirl it in a clockwise manner for approximately one minute.
5. Dispose of used ethanol into the approved container marked for waste.
6. Prepare the drying rack and clean it with ethanol and lab wipes.
7. Pour out screens onto the drying rack, spacing them apart with gloves or the designated forceps appropriate for the screen type.
8. Leave the screens on the rack until they are dry.
9. Transfer the screens into the designated container for clean screens and then seal it. Bring the clean screens back into the sample handling laboratory.
10. Waste disposal: Once the waste level has been reached, contact ethanol laboratory ethanol custodian to schedule EH&S for pickup.

7. REFERENCES

For more information on waste disposal, visit the EH&S Hazardous Waste Management website: <https://safetyervices.ucdavis.edu/units/ehs/hazardous-materials-management>.